

March 5, 2004

Mr. Michael Cook, Director  
Office of Emergency and Remedial Response  
U.S. Environmental Protection Agency  
Washington, DC 20460

SUBJECT: NOTIFICATION OF THE DECOMMISSIONING OF THE KIRTLAND AIR FORCE  
BASE SITE

Dear Mr. Cook:

This letter is intended to notify you of the decommissioning oversight actions that the U.S. Nuclear Regulatory Commission (NRC) has taken and intends to take for the Kirtland Air Force Base (Kirtland AFB) located in Albuquerque, New Mexico.

On October 9, 2002, the NRC and the U.S. Environmental Protection Agency (EPA) entered into a Memorandum of Understanding (MOU) on "Consultation and Finality on Decommissioning and Decontamination of Contaminated Sites." Under the MOU, EPA agreed to continue its Comprehensive Environmental Response, Compensation, and Liability Act deferral policy of not listing sites on the National Priorities List that are subject to NRC's licensing authority. The MOU provides that, unless an NRC-licensed site exceeds any of three trigger criteria contained in the MOU, EPA agrees to a policy of deferral to NRC decision-making on decommissioning without the need for consultation.

For sites that trigger the criteria in the MOU, NRC will consult with EPA at two points in the decommissioning process: (1) prior to NRC's approval of the license termination plan (LTP) or decommissioning plan (DP), which NRC terms Level 1 consultation; and (2) following completion of the Final Status Survey (FSS), which NRC terms Level 2 consultation. Although the NRC's plan for consulting with EPA calls for the initial Level 1 consultation to occur early in the decommissioning process, at the time the MOU was signed NRC had several sites which were in the latter stages of the LTP/DP process. Since these sites were further along in the decommissioning process, the next opportunity to consult with EPA would be a Level 2 consultation following the completion of the FSS.

This letter is to notify you of the existence of one of these sites. This letter is not considered a Level 1 consultation because this site already has an approved decommissioning plan. However, the NRC believes it is in the spirit of the MOU to notify the EPA of sites which could possibly require a Level 2 consultation in the future, and were already well into the decommissioning process at the time the MOU was signed.

#### The Kirtland AFB Site

Portions of the Kirtland AFB site were used for radiation training purposes, beginning in 1961, to train Federal and State personnel on detection of dispersed contamination resulting from

simulated nuclear weapon accidents. To simulate radiological contamination that may result from nuclear accidents, thorium oxide sludge applied at these training facilities served as a low hazard analog to plutonium. A total inventory of 602 kilograms of thorium-232 was applied and tilled into the soil at the site. The site consists of approximately 43 acres, in which approximately 9.4 acres were affected with elevated thorium concentrations. The site is owned by the U.S. Government and regulated by NRC. The approved DP contains a derived concentration guideline level (DCGL) for thorium-232 (Th-232) in soil of 5.7 pCi/g that slightly exceeds the MOU level of 5 pCi/gram. Remediation work is expected to be completed in 2004. However, as the site is covered by the Air Force's Master Materials License, the license will not be terminated when the remediation project is completed.

When site remediation is completed the doses to the average member of the critical group at the Kirtland AFB site will be in compliance with NRC's criteria in Part 20 Subpart E that provides all-pathways dose criteria of 0.25 millisieverts per year (25 millirem per year) plus as low as reasonably achievable (ALARA), to an average member of the critical group. The dose criteria in Part 20 Subpart E are fully protective of the public health and safety and were the result of a comprehensive rulemaking, including an accompanying generic environmental impact statement. Furthermore, individuals at a decommissioned site are expected to receive doses substantially below the constraint level because of ALARA, conservative dose modeling assumptions, and the nature of the cleanup process itself, which often reduces residual contamination levels significantly below site DCGLs. Therefore, based on NRC's decommissioning experience, the staff does not expect that this site will require a Level 2 consultation, because the levels of residual radioactivity remaining after remediation are anticipated to be lower than the MOU trigger levels. However, if the residual radioactive material concentration levels in soil measured in the FSS still exceed the MOU trigger values, NRC will enter into Level 2 consultation with the EPA in accordance with the MOU.

As part of the DP review and approval process, the NRC staff prepared an environmental assessment (EA) to document how the remediation at Kirtland AFB would ensure protection of the public health and safety and the environment.<sup>1</sup> The EA was published in the Federal Register on January 15, 2003, at 68 FR 2078. The EA concludes that approval of the DP would not result in any significant impacts on the human environment and is protective of human health. In addition, the approval of the DP was based on the NRC staff's Safety Evaluation Report (SER) issued on January 6, 2003.<sup>2</sup> The SER concludes that the activities described in the DP are consistent with the Commission's regulations and that approval of the DP would not be inimical to the common defense and security, or to the health and safety of the public.

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<sup>1</sup> The EA is available in NRC's electronic reading room at <http://www.nrc.gov/reading-rm.html> (ML030080492).

<sup>2</sup> The SER is available in NRC's electronic reading room (ML030080421).

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After site remediation activities at Kirtland AFB, NRC staff will review information contained in the FSS Report and compare actual levels of residual radioactivity to the MOU trigger levels. If the FSS measurements trigger the MOU, a consultation between the agencies will occur under the MOU to identify and resolve any remaining issues. In the meantime, if you have any questions regarding this letter or the remediation activities at Kirtland AFB please contact Mr. John Greeves, Director of the Division of Waste Management, at 301-415-7437.

Sincerely,

/RA/

Martin J. Virgilio, Director  
Office of Nuclear Material Safety  
and Safeguards

cc: Kirtland AFB Contact List